	Application No.	Applicant(s)
Notice of Allowability	10/814,548	HAILEY ET AL.
	Examiner	Art Unit	
	Jacques Veillard	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Applicant's amendment filed on 02/21/2007*.

2. ☒ The allowed claim(s) is/are *1, 2, 4-11, 13-18, and 20-24 (Renumbered claims 1-21)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

           International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20070314* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1.   This action is responsive to the applicant's amendment filed on 02/21/2007.

2.   Claims 1, 3, 5, 6, 8, 11-14, 16, 18, 20-24 have been amended, and claim 19 canceled.

3.   Claims 1-18, 20-24 are pending and presented for examination.

EXAMINER'S AMENDMENT

4.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

attorney Derek Stettner (Reg. No, 37,945) on behalf of attorney Molly on March 14, 2007.

        The application has been amended as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A data structure generation system comprising:

        a plurality of data structure components, each data structure component configured to

have a precedence defining an override level of the data structure component, to include one or

more embedded rules, and to include content; and

a computer-implemented knowledge base configured to be coupled to a data structure

assembly facility, the knowledge base configured to store the plurality of data structure

components as objects in an object-relational hierarchy, the knowledge base storing a first set of

objects and a second set of objects, the first set of objects having a first, read-only precedence

level and the second set of objects having a second precedence level higher than the first

precedence level.

3. (Canceled)

4. (Currently Amended) A system as claimed in claim [[3]] 1, further comprising a data structure
assembly facility.

11. (Currently Amended) A computer-implemented knowledge base configured to store data

structure components as objects in an object-relational hierarchy, each object configured to have

a precedence defining an override level of the object, to include one or more embedded rules,

and to include content, the knowledge base storing a first set of data components stored as

objects and a second set of data components stored as objects, the first set of data components

stored as objects having a first, read-only precedence level and the second set of data

components stored as objects having a second precedence level higher than the first precedence

level.

12.   (Canceled)

13. (Currently Amended) A knowledge base as claimed in claim [[12]] 11, wherein each data component stored as an object is configurable to be locked in order to prevent overriding by an object having a higher precedence level.

14. (Currently Amended) A computer-implemented method of assembling a data structure from a group of components, the method comprising:

retrieving one or more cross-referenced data structure components from a database, the one or more data structure components configured to have a precedence level defining an override level for the one or more data structure components;

processing the one or more cross-referenced data structure components in a processor to generate a tree having a root node;

processing the tree beginning at the root node; and

overriding objects of low precedence with objects of high precedence to create a resulting tree; and

transforming the resulting tree into a data structure representing a document.

Drawings

5.   The drawings replacements were received on February 21, 2007. These drawings are approved and placed in the application file as to the merits.

Allowable Subject Matter

6.   Claims 1, 2, 4-11, 13-18, and 20-24 (Re-numbered claims 1-21) are allowed in light of

Applicant's arguments and in light of the prior art made of record.

Reasons for Indicating Allowable Subject matter

7.   The following is an examiner's statement of reasons for allowance: upon searching a

variety of databases, the examiner respectfully submits that the prior art of record fail to teach or

suggest: A) a computer implemented knowledge base configured to store data structure

components as objects in an object-relational hierarchy wherein the knowledge base storing a

first set of data components stored as objects and a second set of data components stored as

objects, the first set of data components stored as objects having a first, read-only precedence

level and the second set of data components stored as objects having a second precedence level

higher than the first precedence level as embodied in the independent claims 1 and 11,

         B) a computer-implemented method of assembling a data structure from a group of

components by retrieving one or more cross-referenced data structure components from a

database, the one or more data structure components configured to have a precedence level

defining an override level for the one or more data structure components; wherein the one or

more cross-referenced data structure components have been processed in a processor to generate

a tree having a root node; the tree being processed beginning at the root node by overriding

objects of low precedence with objects of high precedence in order to create a resulting tree

which been transformed into a data structure representing a document as embodied in the

independent claims 14 and 22. These limitations in context with the other limitations of the

claims were not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

The dependent claims, being further limiting to the independent claims definite and fully enabled by the Specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (571) 272-4086. The examiner can normally be reached on Mon. to Fri. from 9 AM to 4:30 PM, alt. Fri. off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272- 4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.V
J.V
Jacques Veillard
Patent Examiner TC 2100

March 14, 2007